

**IN THE CLAIMS:**

1-37 (Cancelled)

1 38. (Previously Presented) A direct oxidation fuel cell and water generating system,  
2 comprising:  
3 a housing;  
4 a source of fuel in fluid communication with said housing;  
5 a source of oxygen in fluid communication with said housing;  
6 a membrane electrode assembly having a catalyzed membrane electrolyte, with an  
7 anode aspect and a cathode aspect, disposed within said housing, an anode chamber being  
8 defined between said anode aspect of the catalyzed membrane electrolyte and a first exte-  
9 rior portion of said housing, and a cathode chamber being defined between said cathode  
10 aspect of the catalyzed membrane electrolyte and a second exterior portion of said hous-  
11 ing; and  
12 a plurality of openings, a first opening allowing air introduction into said anode  
13 chamber, and a second opening allowing introduction of fuel into said anode chamber,  
14 such that when air and fuel are introduced into said anode chamber, fuel is oxidized on  
15 said anode aspect into water and carbon dioxide, said anode chamber further including an  
16 opening through which carbon dioxide exits.

1 39. (Previously Presented) The system as defined in claim 38 further comprising:  
2 a load detachably coupled across said fuel cell which load receives power from  
3 said fuel cell in an electricity generating mode when said first opening in said anode  
4 chamber is closed to prevent air from entering said anode chamber, and water is gener-  
5 ated on the catalyzed cathode aspect of the membrane electrolyte, such that the system  
6 functions as a direct methanol fuel cell and produces electricity.

1 40. (Previously Presented) The system as defined in claim 38 wherein said first open-  
2 ing is an adjustable oxygen valve in said housing that can be closed to prevent oxygen  
3 from entering said anode chamber.

1 41. (Previously Presented) The system as defined in claim 40 wherein said second  
2 opening is a fuel inlet valve in fluid communication with the anode chamber of said fuel  
3 cell, which operates to introduce fuel into said anode chamber as the system functions in  
4 a water generating mode at said anode chamber.

1 42. (Previously Presented) The system as defined in claim 41 wherein said adjustable  
2 oxygen valve is closed to prevent oxygen from entering said anode chamber, and said  
3 fuel inlet valve operates to introduce fuel into the anode chamber of the fuel cell, and a  
4 load is connected across the fuel cell such that the system functions in an electricity gen-  
5 erating mode.

1 43. (Previously Presented) The system as defined in claim 41 wherein said adjustable  
2 oxygen valve is closed to prevent oxygen from entering said anode chamber, and said  
3 fuel inlet valve operates to introduce fuel into the anode chamber of the fuel cell, and a  
4 load is uncoupled and not connected across the fuel cell such that there is fuel crossover  
5 and the system functions in a water generating mode at the cathode chamber.

1 44. (Previously Presented) The system as defined in claim 43 further comprising said  
2 load being a variable load that can be used to periodically induce fuel crossover, resulting  
3 in the generation of water.

1 45. (Previously Presented) An apparatus for the delivery of water to the anode of a  
2 fuel cell, comprising:  
3 a housing;  
4 a source of fuel in fluid communication with said housing;  
5 a source of oxygen in fluid communication with said housing;  
6 a membrane electrode assembly having a catalyzed membrane electrolyte, with an  
7 anode aspect and a cathode aspect, disposed within said housing, an anode chamber being  
8 defined between said anode aspect of the catalyzed membrane electrolyte and a first exte-  
9 rior portion of said housing, and a cathode chamber being defined between said cathode  
10 aspect of the catalyzed membrane electrolyte and a second exterior portion of said hous-  
11 ing; and  
12 a plurality of openings, a first opening allowing air introduction into said anode  
13 chamber, and a second opening allowing introduction of fuel into said anode chamber,  
14 such that when air and fuel are introduced into said anode chamber, fuel is oxidized on  
15 said anode aspect into water and carbon dioxide, said anode chamber further including an  
16 opening through which carbon dioxide exits such that said system functions to generate  
17 water; and  
18 a coupling to a second fuel cell to deliver water to the anode of said second fuel  
19 cell.

1 46-50 (Cancelled)

1 51. (Previously Presented) A method of employing a direct oxidation fuel cell system  
2 as a combined power generator, and water generator comprising the steps of:  
3 (A) providing a housing;  
4 (B) providing a source of fuel in fluid communication with said housing;  
5 (C) providing a source of oxygen in fluid communication with said housing;

- 6 (D) providing a membrane electrode assembly having a catalyzed membrane  
7 electrolyte, with an anode aspect and a cathode aspect, disposed within  
8 said housing, an anode chamber being defined between said anode aspect  
9 of the catalyzed membrane electrolyte and a first exterior portion of said  
10 housing, and a cathode chamber being defined between said cathode as-  
11 pect of the catalyzed membrane electrolyte and a second exterior portion  
12 of said housing; and  
13 (E) providing a first opening for the introduction of oxygen into the anode  
14 chamber;  
15 (F) providing a second opening for the introduction of fuel into said anode  
16 chamber; and  
17 (G) detachably connecting a load across said membrane electrode assembly.

1 52. (Previously Presented) The method of employing a direct oxidation fuel cell sys-  
2 tem as a combined power generator, and water generator as defined in claim 51 including  
3 the further step of:

4 introducing fuel and oxygen into said anode chamber to oxidize said fuel to pro-  
5 duce water, and detaching said load such that the system produces no electricity.

1 53. (Cancelled)

1 54. (Currently Amended) The method of employing a direct oxidation fuel cell sys-  
2 tem as a combined power generator, and water generator as defined in claim 51 compris-  
3 ing the further step of:

4 | ~~presenting~~ preventing the introduction of oxygen into the anode chamber; and

5           allowing the introduction of fuel into said anode chamber, while not connecting  
6   said load across said membrane electrode assembly, such that fuel is added to said anode  
7   chamber to induce fuel cross over and to generate water in said cathode chamber.

1   55.   (Cancelled)